Department of Energy

Ohio Field Office
Fernald Closure Project
175 Tri-County Parkway
Springdale, Ohio 45246

JUL 31 2006

Mr. James A. Saric, Remedial Project Manager
United States Environmental Protection Agency
Region V-SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

DOE-0180-06

Mr. Thomas Schneider, Project Manager
Ohio Environmental Protection Agency
Southwest District Office
401 East Fifth Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

TRANSMITTAL OF THE ADDENDUM TO THE CERTIFICATION DESIGN LETTER FOR AREA 4A

References:
1) "Certification Design Letter for Area 4A," Document 20803-RP-0004, dated March 2005

2) Letter DOE-0170-06, J. Reising to J. Saric/T. Schneider, "Transmittal of the Addendum to the Certification Design Letter and Certification Project Specific Plan for Area 4B - Part One," dated July 20, 2006

3) Letter, T. Schneider to J. Reising, "Approval - Transmittal of the Addendum to the CDL and Certification PSP for Area 4B - Part One," dated July 26, 2006

4) Letter DOE-0123-06, J. Reising to J. Saric/T. Schneider, "Sampling Methodology for Collecting Soil/Sediment Cores Beneath Water in Submerged Soil Certification Areas and Certification-in-Progress Areas," dated May 16, 2006

This addendum to the Certification Design Letter for Area 4A (Reference 1) presents the plan to recertify a portion of the certified area within the Area 4A footprint. Excessive rainfall events in the spring caused storm water runoff from non-certified areas to overwhelm and breach the runon control berms and ditches of Certified Area 4A. The storm water runoff may have impacted this area. Therefore, a recertification/resampling effort is necessary to demonstrate that soils in Area 4A has not been impacted by the water crossing the certification boundaries from non-certified areas to an extent that soil remediation in the certified area becomes necessary.

The enclosed Figure 1 shows the maximum extent of storm water overflow in the area and the designed re-certification units (CU).

Extent of Recertification

This addendum is consistent with the methodology outlined in the Addendum to the Certification Design Letter and Certification Project Specific Plan for Area 4B - Part One (Reference 2), which was approved by the Ohio Environmental Protection Agency on July 26, 2006 (Reference 3). Real-time scans will be preformed on all areas that were covered by water, but are now dry, and sampling will occur in those areas that remain covered by water.

Certification Unit Design

Two CUs have been designed to cover the subareas within Area 4A that were impacted by storm water runon. Figure 1 shows the extent of the storm water runon and the two CUs (A4A01 and A4A02).

Certification Unit A4A01 was designed to cover a large swath of the previously certified area along the certification area breach line (i.e., the boundary between Area 4A and Area 6E). This swath represents worst-case conditions of potential contamination for the area that has been inundated with water, as the particulate contamination would have settled closest to the breach line. The CU overlaps portions of previously sampled CUs from the eastern end of the original Area 4A certification effort. This area was sampled for the Area 4A area-specific constituents of concern for the previously sampled CUs (i.e., radium-226, radium-228, thorium-228, thorium-232, total uranium, and technetium-99). The certification sample locations that fall within CU A4A01 match the locations of the previous certification effort, and recertification sampling of this CU has been completed.

Certification Unit A4A02 was designed to cover the portion of the previously certified area that is submerged and not covered by CU A4A01. This CU overlaps portions of previously sampled CUs from the northern and central portion of the original Area 4A certification effort. The recertification sample locations that fall within the new CU match 12 locations from the original certification effort. These 12 sampling locations have been randomly selected and will be sampled for total uranium only, as this is the agreed upon indicator parameter.

Sampling Approach

Area 4A re-certification footprint will be treated as two CUs. The area will be re-certified using both real-time scans in areas that have been drained and physically sampling the areas that remain under water. The sampling methodology for the area that remains under water has been documented in Letter DOE-0123-06, Sampling Methodology for Collecting Soil/Sediment Cores Beneath Water in Submerged Soil Certification Areas and Certification-in-Progress Areas (Reference 4).

Data Evaluation

Certification criteria and soil final remediation levels specified in the Sitewide Excavation Plan will be used to determine whether a CU still passes soil certification or not. The data collected during this recertification process will also be compared to the data collected under the original certification effort from these locations. Based on the recertification results, any necessary soil remediation will be identified and implemented with agency approvals.

Documentation

As discussed above, variance 20803-PSP-0003-03 was used to layout a CU in the east portion of the area that was submerged. The samples associated with this variance have been collected. The remaining submerged area will be re-certified under variance 20803-PSP-0003-04. Both variances are attached.

Once all of the samples have been collected, analyzed, reported, and evaluated, the results of the data from CUs A4A01 and A4A02 will be reported in an addendum to the Certification Report for Area 4A.

If you have any questions or require additional information, please contact me at (513) 648-3139.

Sincerely,

Johnny W. Reising
Director

Enclosure

cc w/enclosure:
J. Desormeau, DOE-OH/FCP
T. Schneider, OEPA-Dayton (three copies of enclosure)
G. Jablonowski, USEPA-V, SRF-5J
M. Cullerton, Tetra Tech
M. Shupe, HSI GeoTrans
S. Helmer, ODH
AR Coordinator, Fluor Fernald, Inc./MS6

cc w/o enclosure:
J. Chiou, Fluor Fernald, Inc./MS88
F. Johnston, Fluor Fernald, Inc./MS12
C. Murphy, Fluor Fernald, Inc./MS1

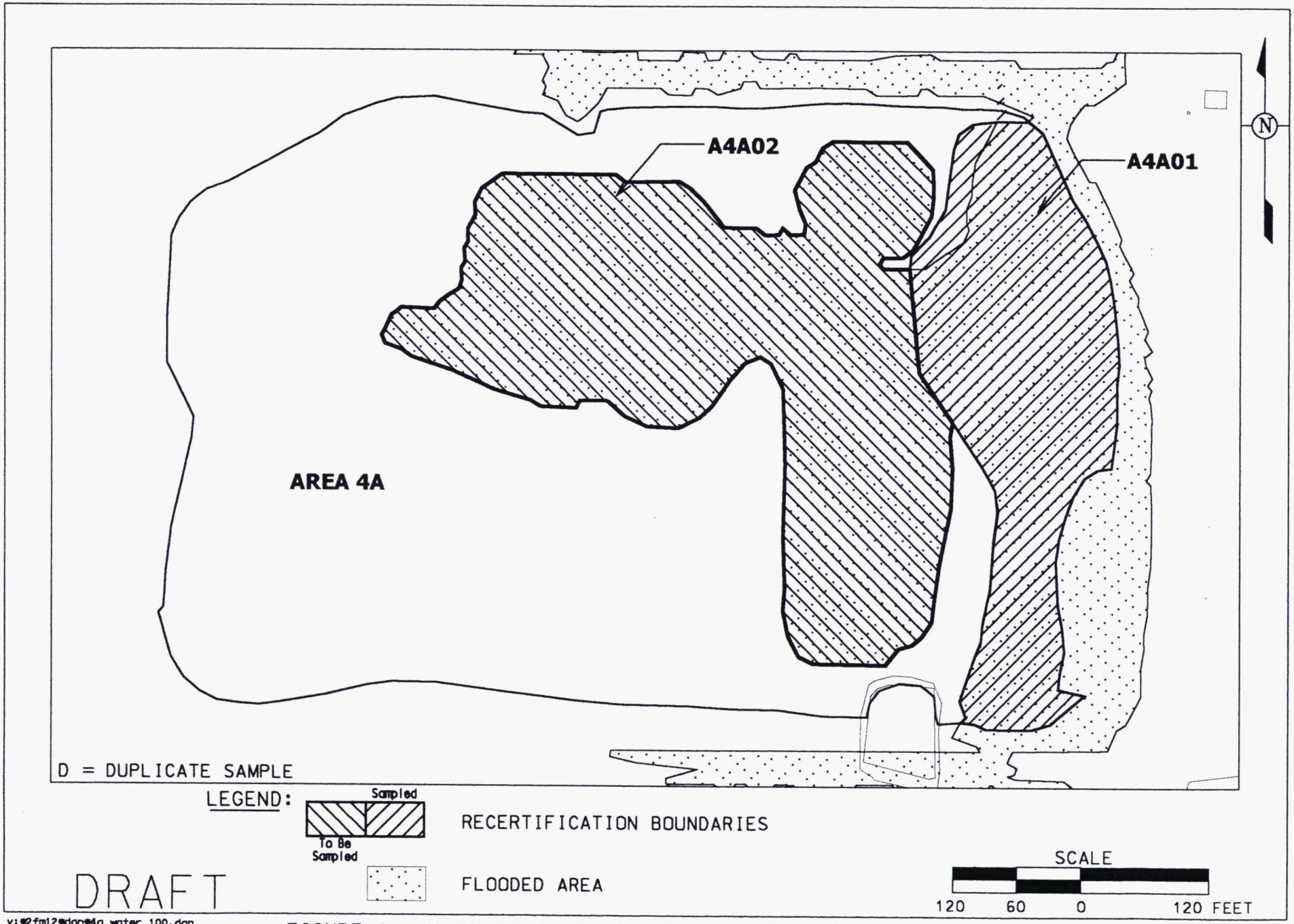


FIGURE 1. MAXIMUM EXTENT OF STORM WATER OVERFLOW IN AREA 4A

0061911

VARIANCE / FIELD CHANGE NOTICE

Significant? (Yes or No): YES

V/F: 20803-PSP-0003-03

WBS NO.: PROJECT/DOCUMENT/ECDC #20803-PSP-0003 REV 0

Page: 1 of 8

PROJECT TITLE: Project Specific Plan for Area 4A Certification Sampling

Date: 6/28/06

VARIANCE / FIELD CHANGE NOTICE (Include justification):

This Variance/Field Change Notice (V/FCN) documents the addition of one certification units (CU), which contains 16 grab soil sampling locations. These samples are being collected because potentially contaminated storm water runoff from Area FPA – 6E breached the run-on control berms and ditches of the certified area (see Figure 1). The CU overlaps portions of previously sampled CUs from the original certification effort. Figure 2 contains a layout of CU A4A01 and its associated sampling locations.

Attachment 1 contains the Sampling and Analytical Requirements and TALs. Attachment 2 contains the sample location information. Attachment 3 outlines the methodology to be followed to collect the samples, which is based on the methodology summarized in letter (DOE-0123-06) from DOE to USEPA and OEPA dated May 16, 2006, "Sampling Methodology for Collecting Soil/Sediment Cores Beneath Water in Submerged Soil Certified Areas and Certification-In-Progress Areas."

Justification:

The purpose of this Re-Certification effort is to demonstrate that soil in Area 4A has not been impacted from water crossing the certification boundary from Area 6 FPA – 6E and that ASCOCs still meet the risk-based FRLs. The new certification unit has been designed to cover a swath of the previously certified area along the certification area breach line. This swath represents worst-case conditions of potential contamination for the area that has been inundated with water, as the particulate contamination would have settled closest to the breach line. The certification sample locations that fall within the new CU match the locations of the previous certification effort. The data collected under this V/FCN will be compared to the data collected under the original certification effort from these locations. If the CU fails certification for any constituent, then this re-certification effort will be re-evaluated and additional sampling will occur. Per Section 4.3 of the PSP, the changes to the PSP will be documented with a V/FCN.

REQUESTED BY: Greg Lupton Date: 6/28/06

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE: B Franke	7-13-06	X	PROJECT MANAGER: J.D. Chiou	6/28/06
	DATA QUALITY MANAGEMENT		X	CHARACTERIZATION MANAGER: F Abitz	28Jun06
X	ANALYTICAL CUSTOMER SUPPORT: Paul S. McGuigan	7/5/06		RTMP Manager	
	WAO		X	Sampling Manager: T. Buhrlage for T.T.B	7/5/06

VARIANCE/FCN APPROVED [X]YES [ ]NO

REVISION REQUIRED: [ ]YES [x]NO

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL: Jeannie Rosser	OTHER:
QUALITY ASSURANCE:	CHARACTERIZATION MANAGER: Frank Miller	OTHER:
FIELD MANAGER:	OTHER:	OTHER:

Attachment 1

TAL(s)	Method[a]	Matrix	Preservative	ASL	TAT[b]	Container[c]	Minimum Mass/Volume	Min. Vol. Water (rinsate)
Radium-226 TAL A	Gamma Spec	Solid	None	D/E[a]	10 days final	Glass with Teflon-lined lid	500 g (1500 g) [d]	4 L

[a] Samples will be analyzed according to ASL D requirements but the minimum detection level may cause some analyses to be considered ASL E.

[b] The sample with the highest Ra-226 result will be selected to go through a 21-day in-growth period. Ra-226 only shall be reported within 25 days to ASL D/E.

[c] Sample container types may be changed at the direction of the Field Sampling Lead, as long as the volume requirements, container compatibility requirements, and SCQ requirements are met.

[d] At the direction of the Field Sampling Lead, triple the specified volume must be collected for all samples at one location in the CU in order for the contract laboratory to perform the required quality control analysis. The samples shall be identified on the Chain of Custody/Request for Analysis forms as "designated for laboratory QC".

Target Analyte List

20803-PSP-0003-A, 16 samples
(Radiological - ASL D/E*)

Analyte	On-Property FRL	MDL (soil)	MDL (water)
Total Uranium	20 mg/kg	2.0 mg/kg	650 ug/L
Radium-226	1.7 pCi/g	0.17 pCi/g	30 pCi/L
Radium-228	1.8 pCi/g	0.18 pCi/g	30 pCi/L
Thorium-228	1.7 pCi/g	0.17 pCi/g	30 pCi/L
Thorium-232	1.5 pCi/g	0.15 pCi/g	30 pCi/L
Technetium-99	30 pCi/g	3.0 pCi/g	10 pCi/L

Attachment 2
Area 4A Certification Sample Locations and Identifiers

CU	Location	Depth	Sample ID*	TAL	North-83	East-83	MSL
A4A01	3-6D	0"-6"	A4A-C3-6W^R A4A-C3-6W^R-D	A	480646.24	1350136.05	572.431
	3-8	0"-6"	A4A-C3-8W^R	A	480619.11	1350193.58	562.602
	3-13V	0"-6"	A4A-C3-13WV	Archive	480579.31	1350138.86	NA
	3-14	0"-6"	A4A-C3-14W^R	A	480585.62	1350201.6	565.987
	3-15	0"-6"	A4A-C3-15W^R	A	480551.51	1350112.6	568.993
	3-16	0"-6"	A4A-C3-16W^R	A	480533.68	1350220.43	564.419
	6-2	0"-6"	A4A-C6-2W^R	A	480467.66	1350099.53	563.931
	6-4	0"-6"	A4A-C6-4W^R	A	480406.3	1350127.32	567.24
	6-5	0"-6"	A4A-C6-5W^R	A	480480.7	1350160.73	561.878
	6-6	0"-6"	A4A-C6-6W^R	A	480488.42	1350228.64	561.706
	6-7V	0"-6"	A4A-C6-7WV	Archive	480437.18	1350171.55	NA
	6-8	0"-6"	A4A-C6-8W^R	A	480424.25	1350228.96	561.994
	6-13V	0"-6"	A4A-C6-13WV	Archive	480368.92	1350168.48	NA
	6-14	0"-6"	A4A-C6-14W^R	A	480394.15	1350260.39	565.987
	6-15	0"-6"	A4A-C6-15W^R	A	480302.66	1350170.11	568.993
	6-16	0"-6"	A4A-C6-16W^R	A	480343.43	1350215.04	564.419
	8-14	0"-6"	A4A-C8-14W^R	A	480259.43	1350220.04	566.395
	8-15	0"-6"	A4A-C8-15W^R	A	480184.05	1350161.79	565.459
	8-16	0"-6"	A4A-C8-16W^R	A	480173.89	1350214.9	566.184

* If the bottom sampling depth is > 0.5 feet (6 inches), then the bottom depth (in feet) shall be multiplied by 2, and the resulting value will be added to the end of the sample ID. For example, if the bottom depth of the sampling interval for sample A4A-C6-14^R is 1 foot, then the sample ID shall be modified by adding a "-2" (i.e. 1 x 2 = 2) to the end of the sample ID (A4A-C6-14^R-2).

Attachment 3

Re-Certification of Area 4A, CU A4A01

Submerged Sediment/Soil Sampling Requirements

1. After locating the sampling point, determine the depth to the basin floor (top of sediment) using the water surface as a reference. A sounding device that will not penetrate the soft sediment should be used for this step (nylon measuring tape attached to disk). Determine the basin floor (sediment) elevation and record in Table 1 (attached).

2. A two-foot continuous core sample will be collected initially. With the tool string fully assembled on the platform, mark a reference point on the sampling tool string that will correspond to either the "top of platform" or "top of water" after the core sampler has been driven to a depth of 2.0 feet into the basin floor.

3. Drive the core sampler assembly into the basin floor until the reference mark is reached (e.g., aligns with "top of platform").

4. Retrieve the core sampler using upward action of the slide hammer. Once the core sampler is free from the soil/sediment surface, ensure that the core sampler is slowly pulled up through the water to the surface to prevent sample loss.

5. Examine the soil/sediment core and record the depth range of the sediment (e.g., 0-4") and the depth range of the glacial till material (probably a clay consistency).

6. The following samples will be collected based on examination of the core (see core illustrations for various scenarios):

    a. If the sediment layer is <3 inches or nonexistent, then only one 6-inch sample will be collected from the sample point (note that this 6-inch sample could be partially comprised of both sediment and glacial till (clayey material) layers).

    b. If the sediment layer is >3 inches, then a second sample from the glacial till (clayey material) will be collected. This second sample will be collected from the next 6-inch interval that consists solely of glacial till (clayey material).

7. If additional volume is necessary, then repeat the core sample collection process within approximately two feet radius of the first core location (verify with GPS). On this second core sample, the sampling depth may be reduced to 1.5 feet if the sediment layer is observed to be <6 inches dependent.

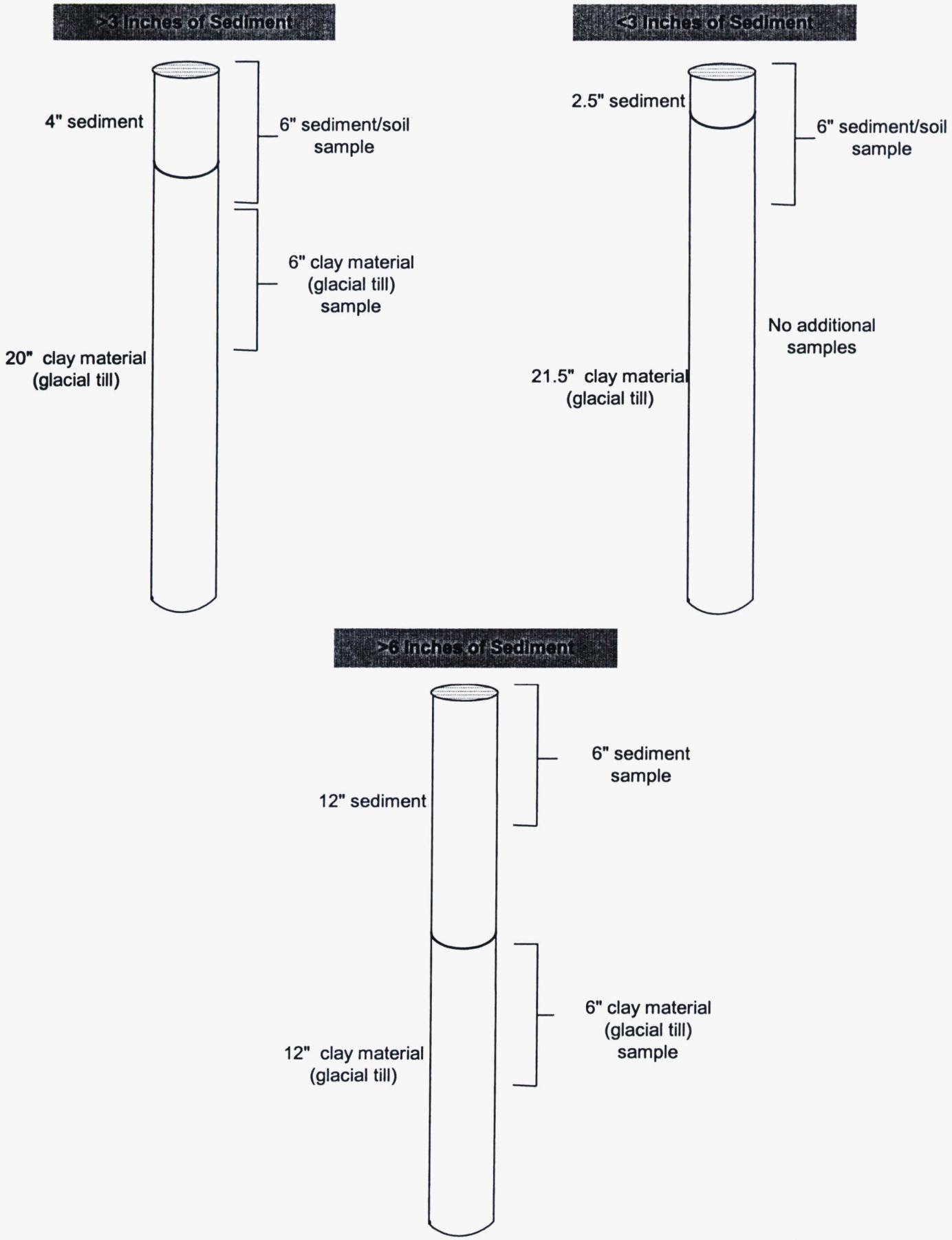
Attachment 3

Table 1: Sample Collection Log - - Area 4A Re-Certification

CU	Location	Sample ID	TAL	North-83	East-83	Previous Elevation (feet)	Water Elevation (feet)	Depth to Floor (feet)	New Floor Elevation (feet)	Sample #1 Interval Collected (inches)	Sample #2 Interval Collected (inches)
A4A01	3-6WD	A4A-C3-6W^R	A	480646.24	1350136.05	572.431				*to*	*to*
		A4A-C3-6W^R-D								*to*	*to*
	3-8W	A4A-C3-8W^R	A	480619.11	1350193.58	562.602				*to*	*to*
	3-13WV	A4A-C3-13WV	Archive	480579.31	1350138.86	NA				*to*	*to*
	3-14W	A4A-C3-14W^R	A	480585.62	1350201.6	565.987				*to*	*to*
	3-15W	A4A-C3-15W^R	A	480551.51	1350112.6	568.993				*to*	*to*
	3-16W	A4A-C3-16W^R	A	480533.68	1350220.43	564.419				*to*	*to*
	6-2W	A4A-C6-2W^R	A	480467.66	1350099.53	563.931				*to*	*to*
	6-4W	A4A-C6-4W^R	A	480406.3	1350127.32	567.24				*to*	*to*
	6-5W	A4A-C6-5W^R	A	480480.7	1350160.73	561.878				*to*	*to*
	6-6W	A4A-C6-6W^R	A	480488.42	1350228.64	561.706				*to*	*to*
	6-7WV	A4A-C6-7WV	Archive	480437.18	1350171.55	NA				*to*	*to*
	6-8W	A4A-C6-8W^R	A	480424.25	1350228.96	561.994				*to*	*to*
	6-13WV	A4A-C6-13WV	Archive	480368.92	1350168.48	NA				*to*	*to*
	6-14W	A4A-C6-14W^R	A	480394.15	1350260.39	565.987				*to*	*to*
	6-15W	A4A-C6-15W^R	A	480302.66	1350170.11	568.993				*to*	*to*
	6-16W	A4A-C6-16W^R	A	480343.43	1350215.04	564.419				*to*	*to*
	8-14W	A4A-C8-14W^R	A	480259.43	1350220.04	566.395				*to*	*to*
	8-15W	A4A-C8-15W^R	A	480184.05	1350161.79	565.459				*to*	*to*
	8-16W	A4A-C8-16W^R	A	480173.89	1350214.9	566.184				*to*	*to*

Attachment 3

Figure 1: Sample Collection Scenarios



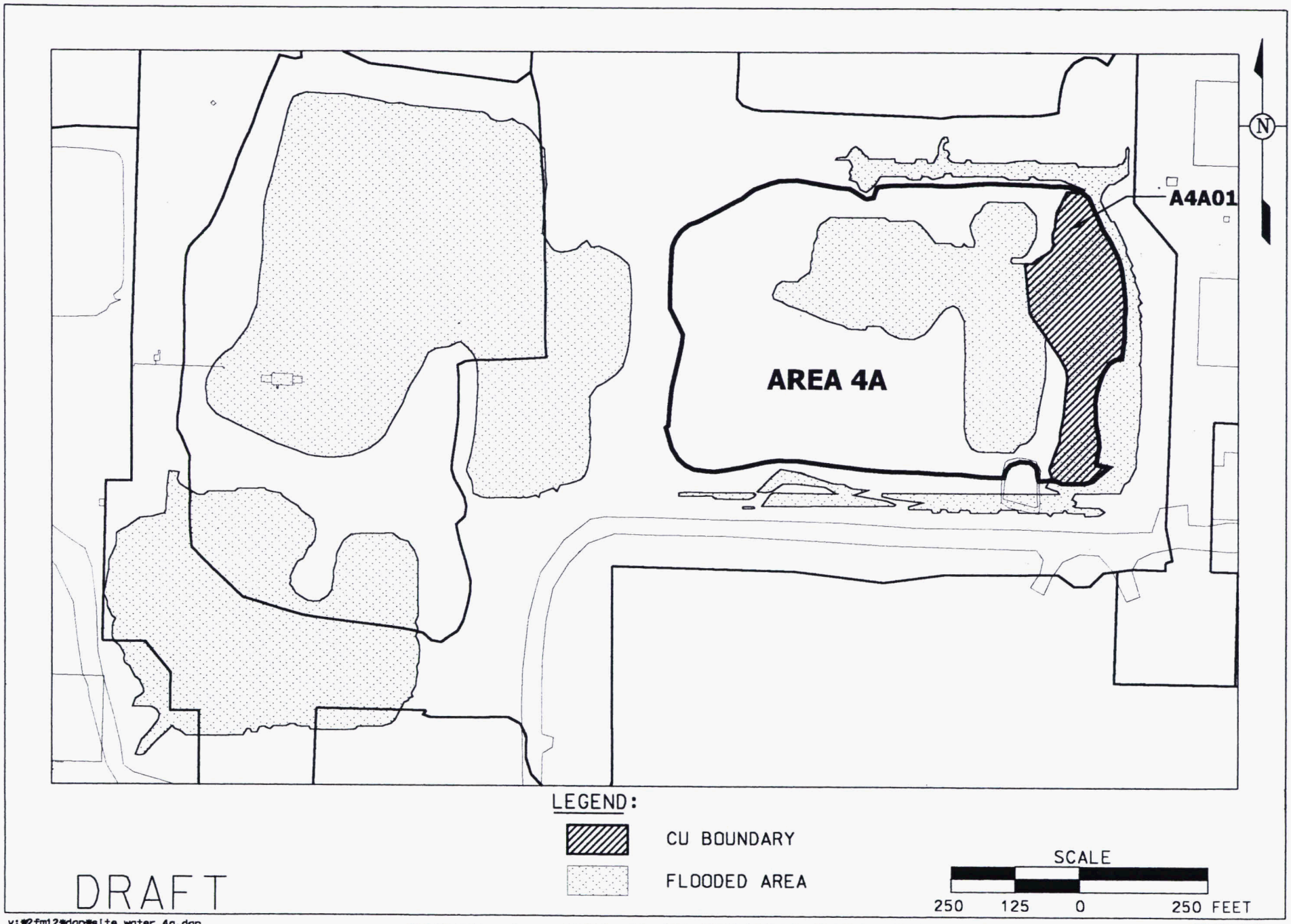


FIGURE 1. AREA 4A RE-CERTIFICATION AREA

0061931

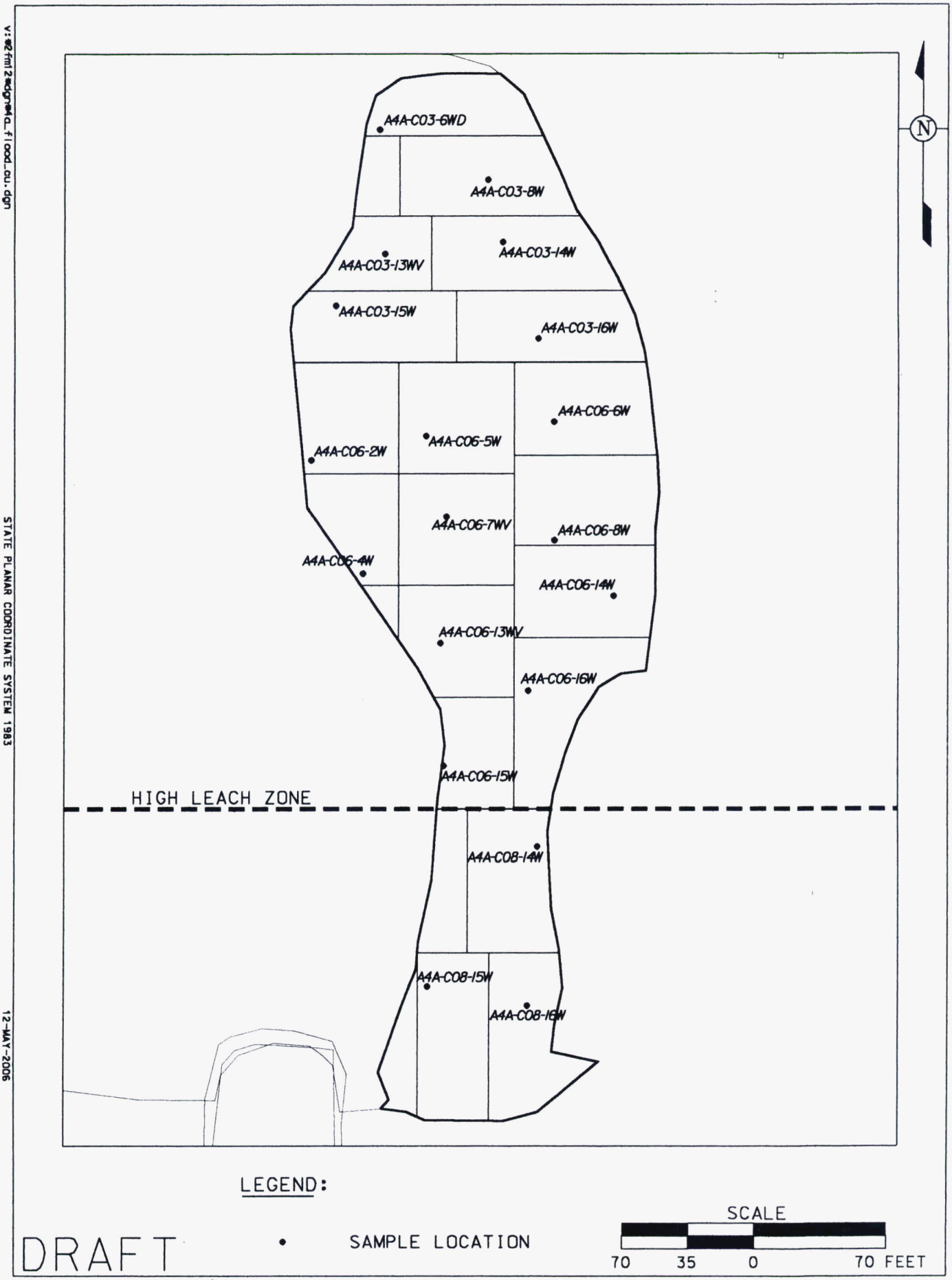


FIGURE ~~4~~ 2. RE-CERTIFICATION SAMPLING LOCATIONS FOR CU A4A01

GJZ
6/28/06

006191

VARIANCE / FIELD CHANGE NOTICE	Significant? (Yes or No): YES	V/F: 20803-PSP-0003-04
WBS NO.: PROJECT/DOCUMENT/ECDC #20803-PSP-0003 REV 0		Page: 1 of 8
PROJECT TITLE: Project Specific Plan for Area 4A Certification Sampling		Date: 7/17/06

VARIANCE / FIELD CHANGE NOTICE (Include justification):

This Variance/Field Change Notice (V/FCN) documents the addition of one certification unit (CU), consisting of 12 soil sampling locations in the north central portion of Area 4A. These samples are being collected because potentially contaminated storm water runoff from Area FPA – 6E breached the run-on control berms and ditches of the certified area (see Figure 1). Certification Unit A4A02 overlaps portions of previously sampled locations from the original Area 4A certification effort (see Figure 2). Re-certification samples shall be collected and analyzed for total uranium (TAL G).

Attachment 1 contains the Sampling and Analytical Requirements and TAL. Attachment 2 contains the sample location information. Attachment 3 outlines the methodology to be followed to collect the samples that are beneath the surface of existing ponds of water, which is based on the methodology summarized in the letter (DOE-0123-06) from DOE to USEPA and OEPA dated May 16, 2006, "Sampling Methodology for Collecting Soil/Sediment Cores Beneath Water in Submerged Soil Certified Areas and Certification-In-Progress Areas." If the sampling location is no longer submerged, then the location elevation shall be measured directly and steps 5-7 of Attachment 3 shall be followed.

Justification:

The purpose of this Re-Certification effort is to demonstrate that soil in the northern and central portions of Area 4A has not been impacted from water crossing the certification boundary on the eastern side of Area 4A end from Area FPA – 6E and that total uranium still meets the risk-based FRL. The new certification unit has been designed to cover the previously certified area that is currently submerged and has not been resampled. The certification sample locations that fall within the new CU match the locations of the previous certification effort. The data collected under this V/FCN will be compared to the data collected under the original certification effort from these locations. Per Section 4.3 of the PSP, the changes to the PSP will be documented with a V/FCN.

REQUESTED BY: Greg Lupton Date: 7/17/06

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE: R. Fricke	7/18/06	X	PROJECT MANAGER: J.D. Chiou	7/17/06
	DATA QUALITY MANAGEMENT		X	CHARACTERIZATION MANAGER: R. Abitz	17Jul06
X	ANALYTICAL CUSTOMER SUPPORT: Paul S. Merrigan			RTIMP Manager	
	WAO		X	Sampling Manager: T. Buhrlage Mike Fuhs for TB	7-19-06

VARIANCE/FCN APPROVED [X]YES [ ]NO REVISION REQUIRED: [ ]YES [x]NO

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL: Jeannie Rosser	OTHER:
QUALITY ASSURANCE:	CHARACTERIZATION MANAGER: Frank Miller	OTHER:
FIELD MANAGER:	OTHER:	OTHER:

Attachment 1
Sampling and Analytical Requirements

TAL(s)	Method[a]	Matrix	Preservative	ASL	TAT	Container[b]	Minimum Mass/Volume	Min. Vol. Water (rinsate)[d]
Radiological TAL G	ICP/MS	Solid	None	D/E	7 days final	Glass or Plastic	50 g (150 g)[c]	1 L

[a] Samples will be analyzed according to ASL D requirements but the minimum detection level may cause some analyses to be considered ASL E.

[b] Sample container types may be changed at the direction of the Field Sampling Lead, as long as the volume requirements, container compatibility requirements, and SCQ requirements are met.

[c] At the direction of the Field Sampling Lead, triple the specified volume must be collected for all samples at one location in the CU in order for the contract laboratory to perform the required quality control analysis. The samples shall be identified on the Chain of Custody/Request for Analysis forms as "designated for laboratory QC".

[d] If "push tubes" are used for sampling, the off-site laboratories will be sent container blanks. If an alternative sample method is used, the Field Technicians will collect a rinsate.

Target Analyte List

20803-PSP-0003-G, 13 samples
(Radiological - ASL D/E*)

Analyte	On-Property FRL	MDL (soil)	MDL (water)
Total Uranium	20 mg/kg	2.0 mg/kg	350 ug/L

Attachment 2
Area 4A Certification Sample Locations and Identifiers

CU	Location	Depth	Sample ID*	TAL	North-83	East-83	MSL
A4A02	2-14	0"-6"	A4A-C2-14W^R	G	480576.56	1349858.40	564.69
	2-15	0"-6"	A4A-C2-15W^R	G	480547.46	1349774.79	560.37
	3-7	0"-6"	A4A-C3-12W^R	G	480539.01	1350004.32	562.49
	3-10	0"-6"	A4A-C4-2W^R	G	480486.91	1349608.19	573.78
	4-6	0"-6"	A4A-C4-6W^R	G	480489.01	1349729.54	560.84
	5-3D	0"-6"	A4A-C5-3W^R	G	480446.35	1349789.51	565.41
			A4A-C5-3W^R-D				
	5-5	0"-6"	A4A-C5-5W^R	G	480475.78	1349944.97	570.07
	5-16	0"-6"	A4A-C5-16W^R	G	480315.67	1350005.28	562.86
	6-3	0"-6"	A4A-C6-3W^R	G	480435.59	1350044.76	564.45
	6-9	0"-6"	A4A-C6-9W^R	G	480360.51	1350069.80	561.69
	8-6	0"-6"	A4A-C8-6W^R	G	480229.86	1350038.14	565.37
	8-10	0"-6"	A4A-C8-10W^R	G	480267.64	1350097.44	563.98

* If the bottom sampling depth is > 0.5 feet (6 inches), then the bottom depth (in feet) shall be multiplied by 2, and the resulting value will be added to the end of the sample ID. For example, if the bottom depth of the sampling interval for sample A4A-C2-14W^R is 1 foot, then the sample ID shall be modified by adding a "-2" (i.e. 1 x 2 = 2) to the end of the sample ID (A4A-C2-14W^R-2).

Attachment 3

Re-Certification of Area 4A, CU A4A02

Submerged Sediment/Soil Sampling Requirements

1. After locating the sampling point, determine the depth to the basin floor (top of sediment) using the water surface as a reference. A sounding device that will not penetrate the soft sediment should be used for this step (nylon measuring tape attached to disk). Determine the basin floor (sediment) elevation and record in Table 1 (attached).

2. A two-foot continuous core sample will be collected initially. With the tool string fully assembled on the platform, mark a reference point on the sampling tool string that will correspond to either the "top of platform" or "top of water" after the core sampler has been driven to a depth of 2.0 feet into the basin floor.

3. Drive the core sampler assembly into the basin floor until the reference mark is reached (e.g., aligns with "top of platform").

4. Retreive the core sampler using upward action of the slide hammer. Once the core sampler is free from the soil/sediment surface, ensure that the core sampler is slowly pulled up through the water to the surface to prevent sample loss.

5. Examine the soil/sediment core and record the depth range of the sediment (e.g., 0-4") and the depth range of the glacial till material (probably a clay consistency).

6. The following samples will be collected based on examination of the core (see core illustrations for various scenarios):

    a. If the sediment layer is <3 inches or nonexistent, then only one 6-inch sample will be collected from the sample point (note that this 6-inch sample could be partially comprised of both sediment and glacial till (clayey material) layers).

    b. If the sediment layer is >3 inches, then a second sample from the glacial till (clayey material) will be collected. This second sample will be collected from the next 6-inch interval that consists solely of glacial till (clayey material).

7. If additional volume is necessary, then repeat the core sample collection process within approximately two feet radius of the first core location (verify with GPS). On this second core sample, the sampling depth may be reduced to 1.5 feet if the sediment layer is observed to be <6 inches dependent.

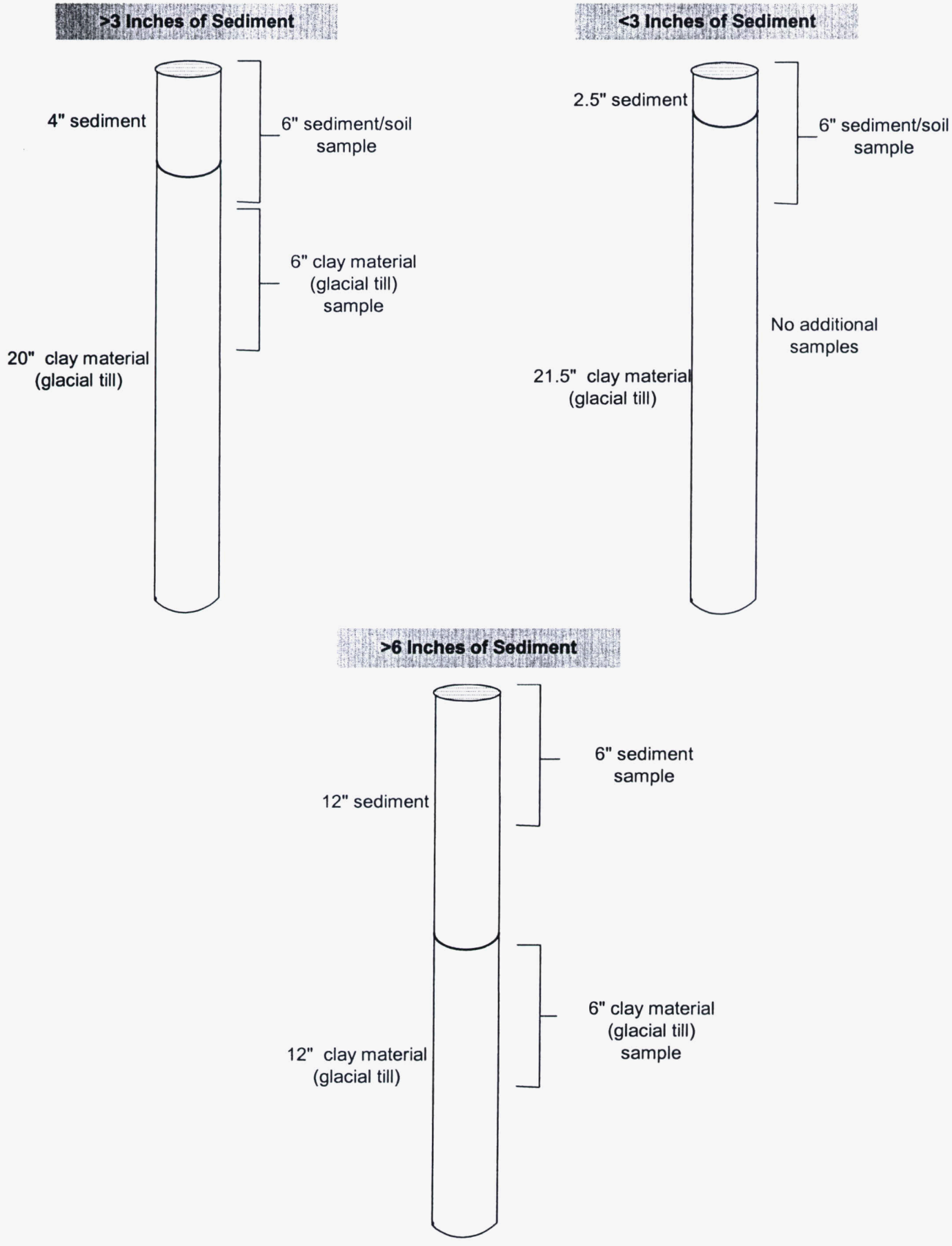
Attachment 3

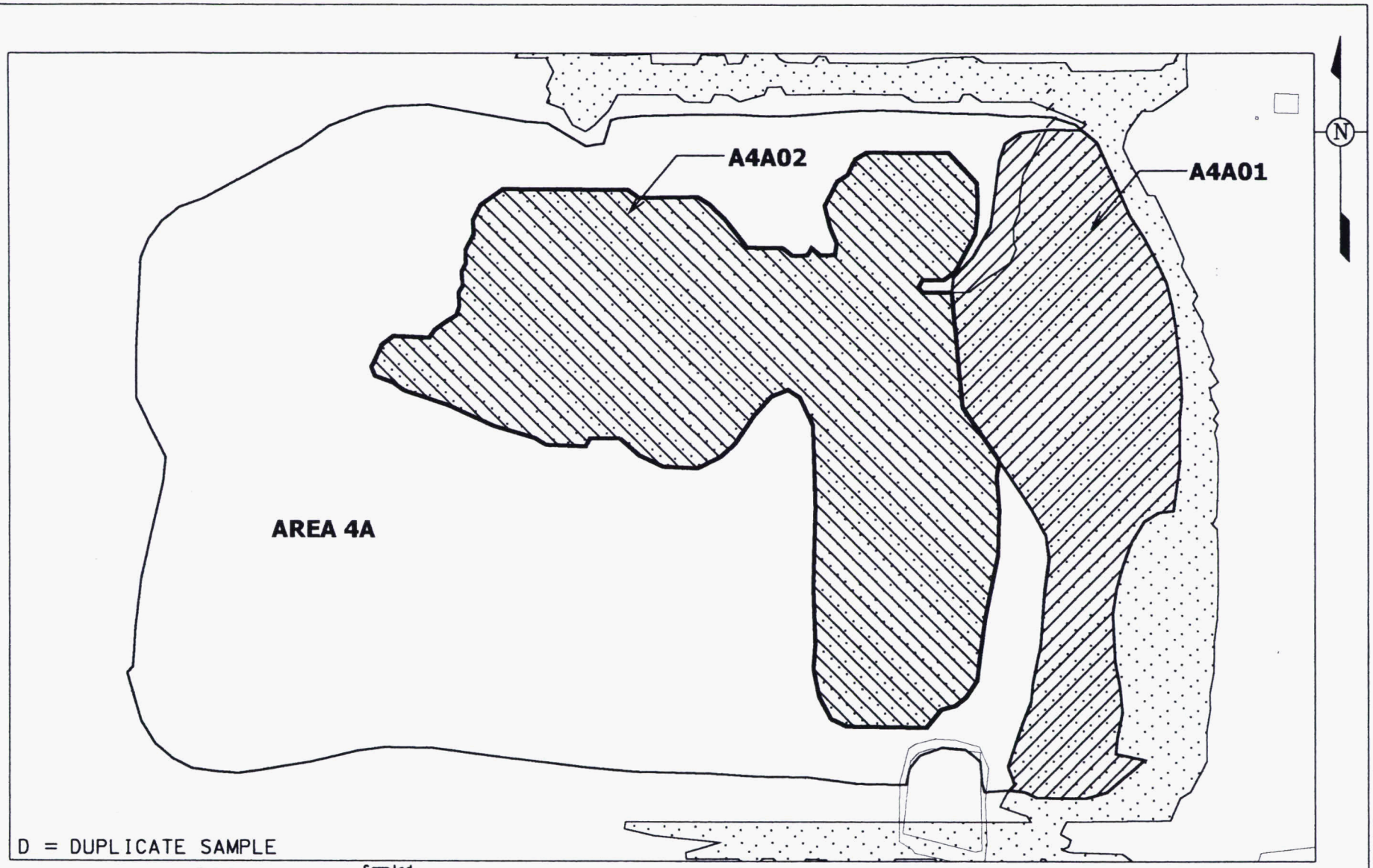
Table 1: Sample Collection Log - - Area 4B-Part 1 CU A4B03 Re-Certification

CU	Location	Sample ID	TAL	North-83	East-83	Previous Elevation (feet)	Water Elevation (feet)	Depth to Floor (feet)	New Floor Elevation (feet)	Sample #1 Interval Collected (inches)	Sample #2 Interval Collected (inches)
A4A02	2-14	A4A-C2-14W^R	G	480576.56	1349858.40	564.69				*to*	*to*
	2-15	A4A-C2-15W^R	G	480547.46	1349774.79	560.37				*to*	*to*
	3-7	A4A-C3-7W^R	G	480633.64	1350094.95	564.47				*to*	*to*
	3-10	A4A-C3-10W^R	G	480581.12	1350018.67	562.28				*to*	*to*
	4-6	A4A-C4-6W^R	G	480489.01	1349729.54	560.84				*to*	*to*
	5-3D	A4A-C5-3W^R	G	480446.35	1349789.51	565.41				*to*	*to*
		A4A-C5-3W^R-D								*to*	*to*
	5-5	A4A-C5-5W^R	G	480475.78	1349944.97	570.07				*to*	*to*
	5-16	A4A-C5-16W^R	G	480315.67	1350005.28	562.86				*to*	*to*
	6-3	A4A-C6-3W^R	G	480435.59	1350044.76	564.45				*to*	*to*
	6-9	A4A-C6-9W^R	G	480360.51	1350069.80	561.69				*to*	*to*
	8-6	A4A-C8-6W^R	G	480229.86	1350038.14	565.37				*to*	*to*
	8-10	A4A-C8-10W^R	G	480267.64	1350097.44	563.98				*to*	*to*

Attachment 3

Figure 1: Sample Collection Scenarios





v:\2fm12\dgn\4a_water_100.dgn
STATE PLANAR COORDINATE SYSTEM 1983

FIGURE 1. MAXIMUM EXTENT OF STORM WATER OVERFLOW IN AREA 4A

18-JUL-2006

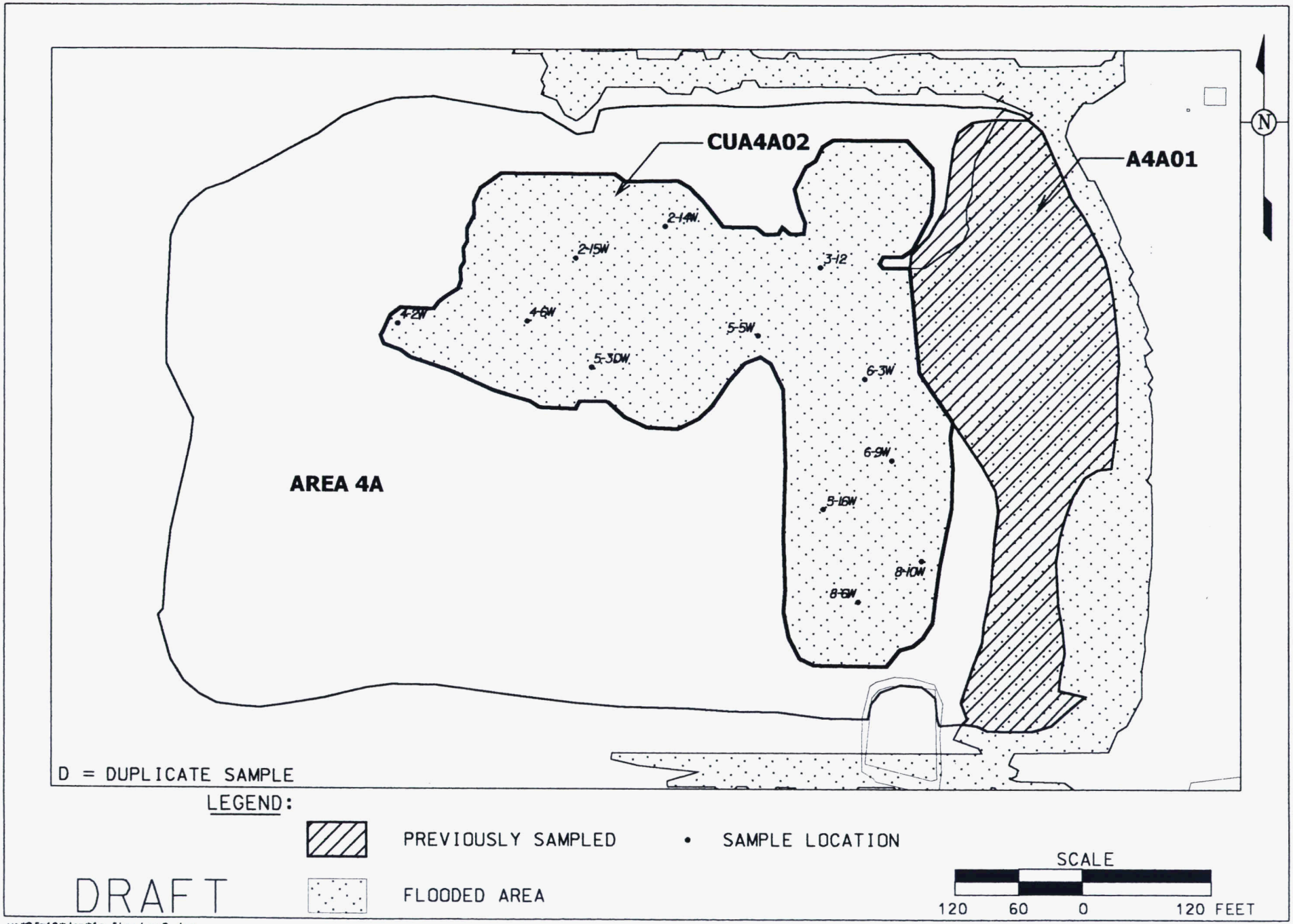


FIGURE 2. CERTIFICATION SAMPLING LOCATIONS FOR CUA4A02